

Public Meeting on Straight Creek Tributaries in Lee County

October 21, 2008



Why Are We Here?

- Learn about water quality in six Straight Creek tributaries
- Explain efforts that the State is undertaking to improve and protect water quality
- Learn what you can do to help

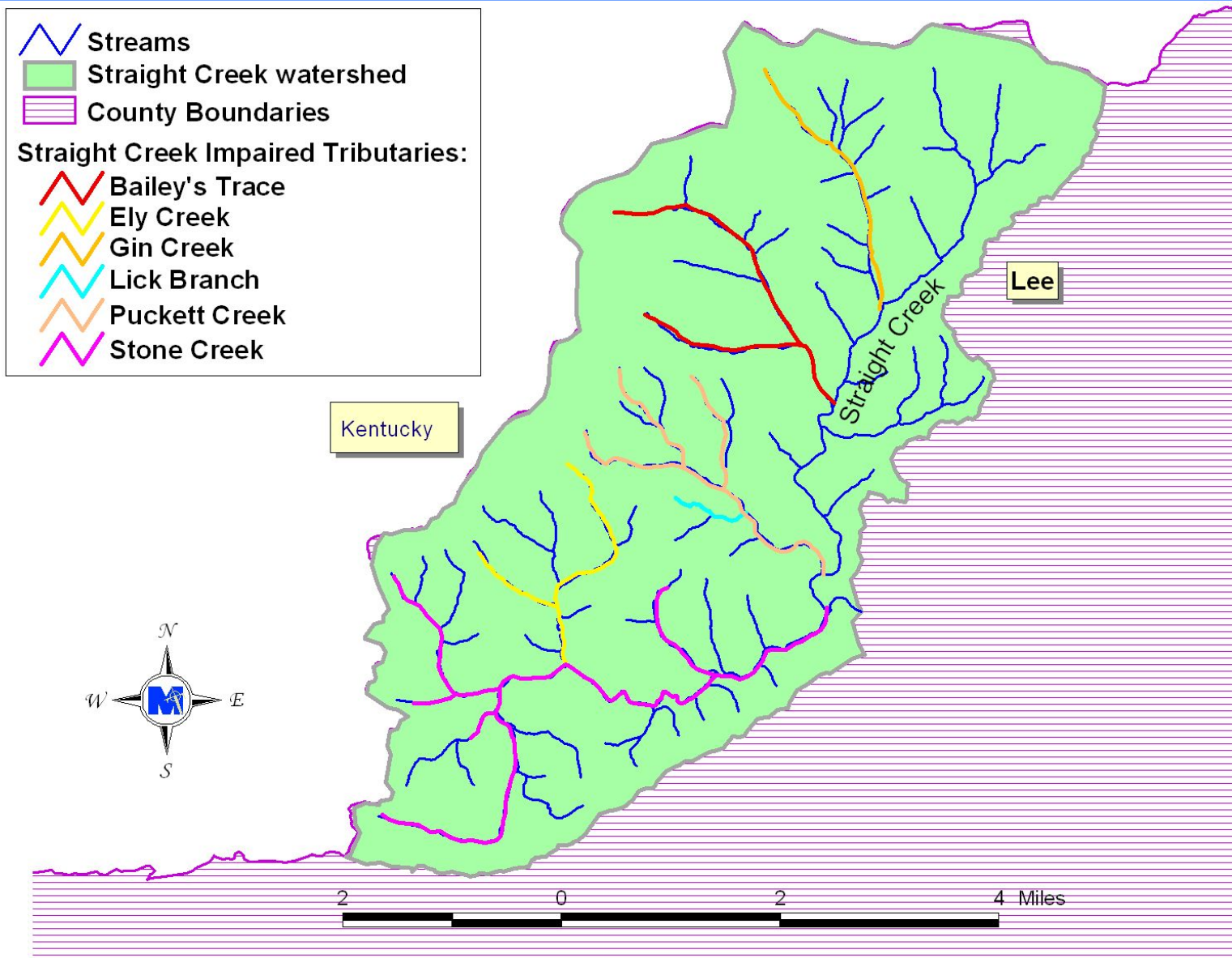


What's the Status of these Tributaries?

- DEQ routinely monitors the quality of waters across the state and reports those results every 2 years
- In every report since (1996), all six Straight Creek tributaries were listed as “impaired” because of low biological monitoring scores.



Biologically Impaired Tributaries in the Straight Creek Watershed



Biological Impairment

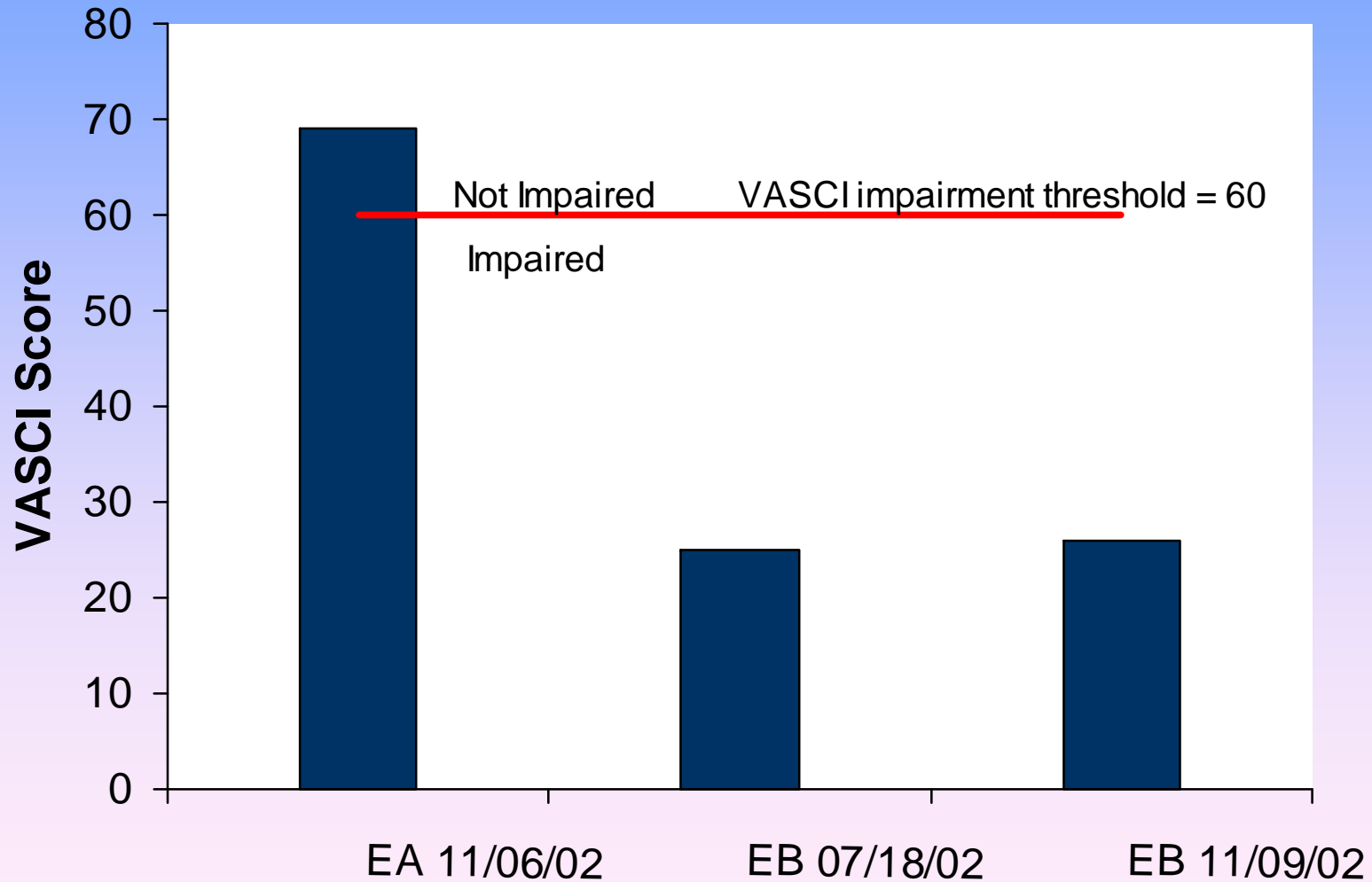
What does impaired mean?

- The biological monitoring score was below the impairment threshold of 60.

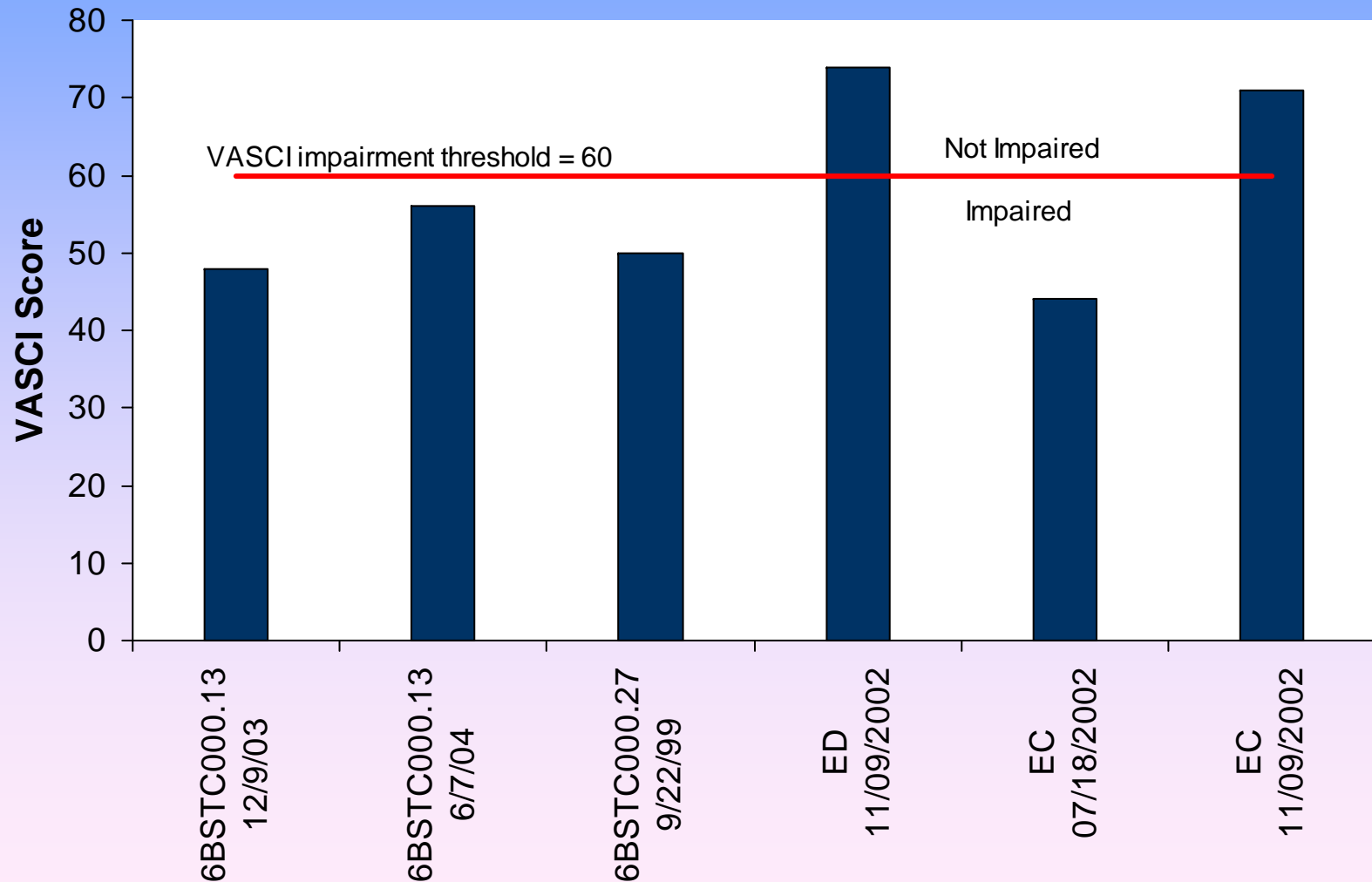
What is the standard?

- DEQ uses the general standard which states “All state waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life. “

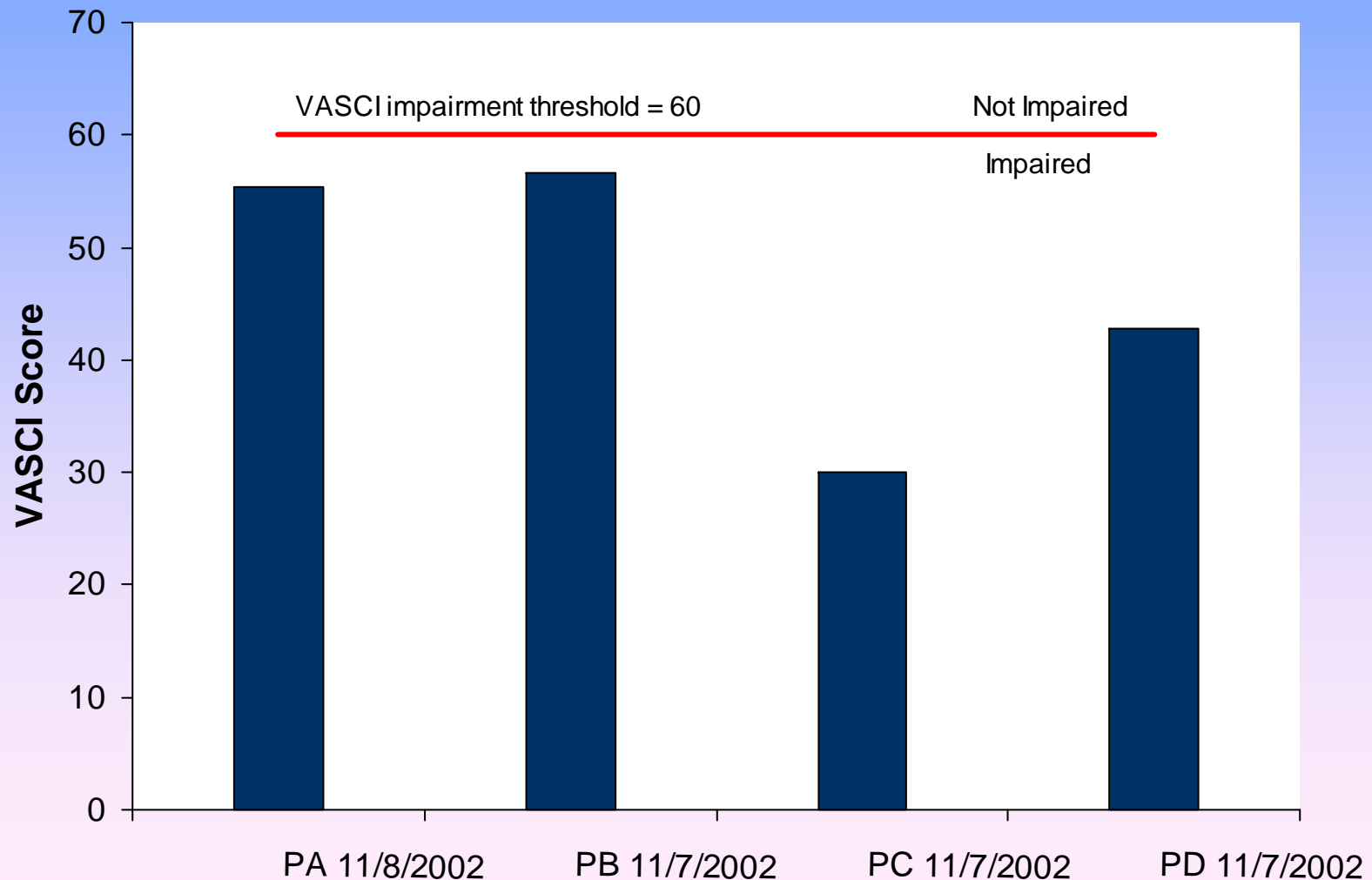
What Are Biological Monitoring Scores in Ely Creek & Tributaries?



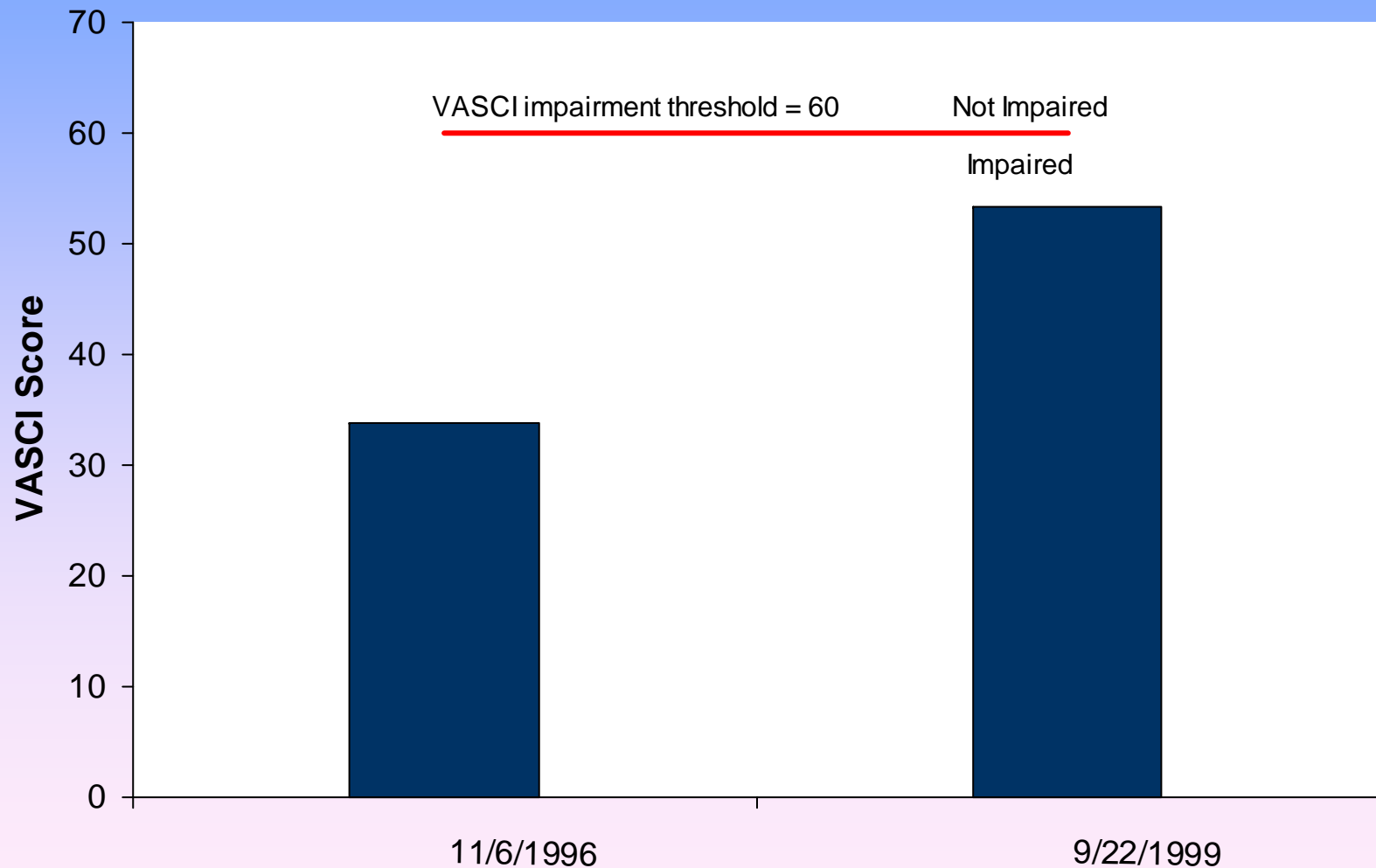
What Are Biological Monitoring Scores in Stone Creek?



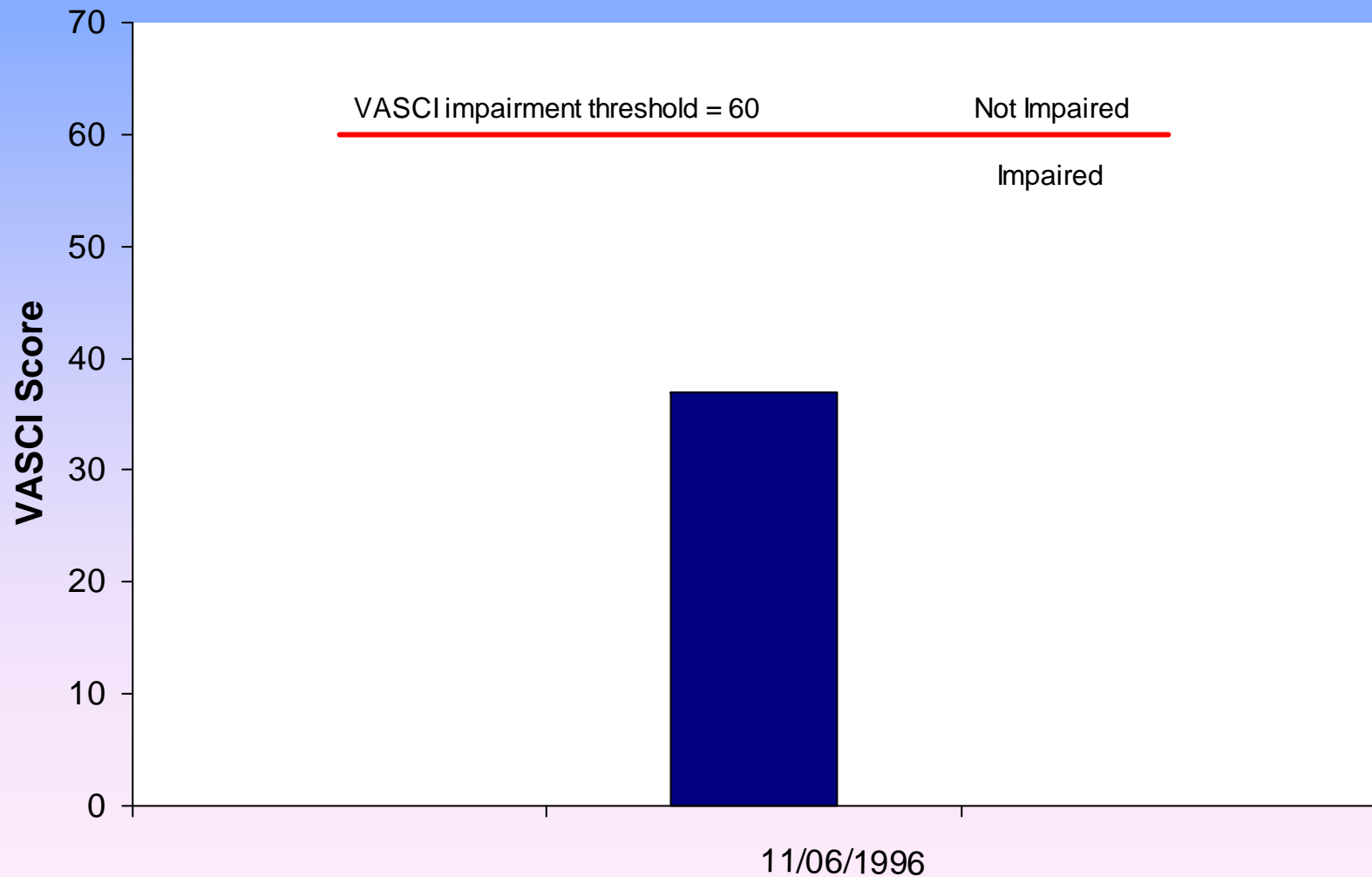
What Are Biological Monitoring Scores in Puckett Creek and Lick Branch?



What Are Biological Monitoring Scores in Bailey's Creek?

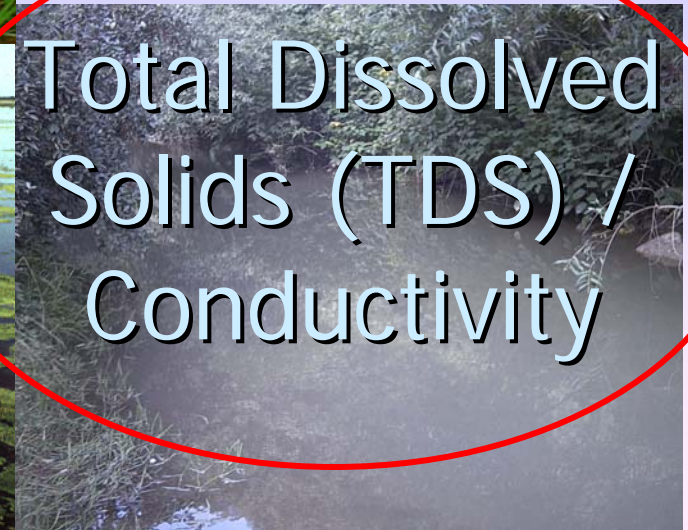
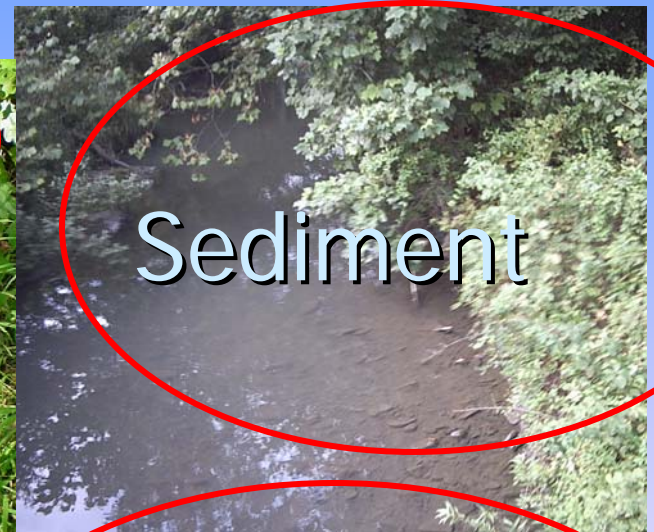
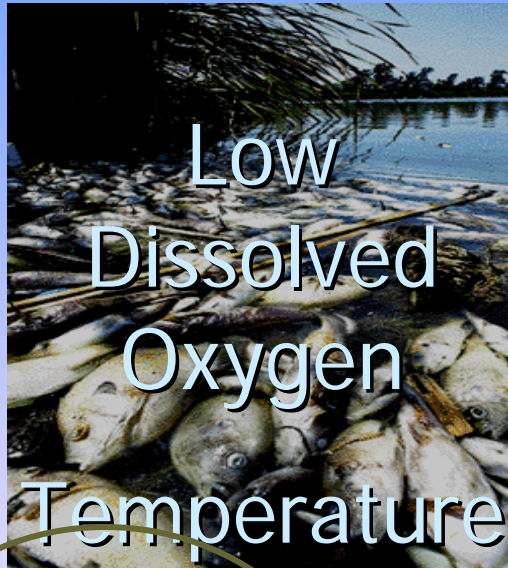


What Are Biological Monitoring Scores in Gin Creek?



Impaired Tributaries:

What is harming the Aquatic Life?



Straight Creek Tributaries Probable Stressors

| <u>Stream</u> | <u>Stressor(s)</u> |
|----------------|------------------------------|
| Ely Creek | Total Dissolved Solids (TDS) |
| Stone Creek | Total Dissolved Solids (TDS) |
| Puckett Creek | Total Dissolved Solids (TDS) |
| Lick Branch | Sediment, TDS & pH |
| Bailey's Trace | Sediment & TDS |
| Gin Creek | Sediment & TDS |



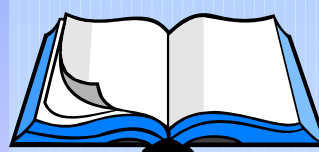
What Happens When a Stream is Impaired?

- The State begins a formal process to clean up that water body (a TMDL)

T_{total}
 M_{maximum}
 D_{daily}
 L_{load}

We are here

Implementation Plan



- Identifies permit controls or best management practices needed to make necessary pollutant reductions

Monitoring



Implementation

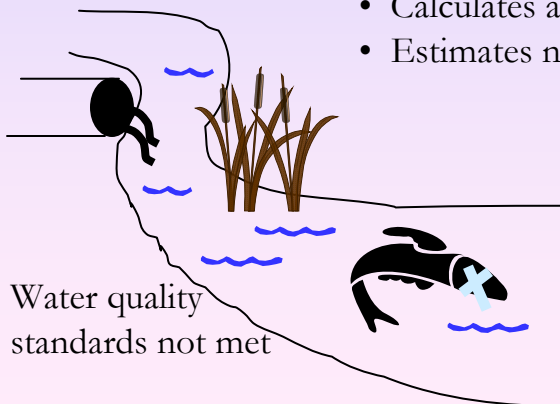


Clean

Water quality standards met

Polluted

- Identifies sources of pollution
- Calculates amounts from each source
- Estimates necessary pollutant reductions



The Process

What are the Study Goals?

- Identify causes of the biological impairments (stressors)
- Quantify amounts of each stressor
- Determine an appropriate endpoint for each stressor
- Estimate reductions necessary to meet the water quality standard



What Can You Do to Help?

- Participate on the Technical Advisory Committee
 - Group of local citizens, landowners, organizations, and government entities that will provide input, review and assistance to DEQ during the study
 - Goal - make sure technical aspects of the study are accurate as well as acceptable to the community



Recap

- Biological impairments in six Straight Creek tributaries including:
 - Ely Creek, Stone Creek, Puckett Creek, Lick Branch, Bailey's Trace and Gin Creek.
- DEQ is beginning a Water Quality Study to investigate these impairments
- Study will be followed up by developing an implementation plan to reduce the pollutant levels found to be causing the problems.



Questions?

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- Comment period for this public meeting ends
Dec. XX, 2008

